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#### Heads

... 1806 Side Inlet with **Swing Joint**, 58 KB, 115 KB, 109 KB. 1806 Side Inlet with Swing Pipe, 62 KB, 126 KB ... Back to Product CAD Detail Drawings Index ...  
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 Supply & design. Multiple flow,  
 High or low pressure, all sizes.  
[www.rotaflow.com](http://www.rotaflow.com)

### Rain Bird - Landscape Irrigation: Product Detail Drawings:

#### Rotors

... 5505 with **Swing Joint**, 160 KB, 494 KB, 123 KB. 5505 with Swing Pipe, 90 KB, 234 KB, 112 KB ... Back to Product CAD Detail Drawings Index ...  
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### Jet Aeration Technology, Radial Jet Aerator, Jet Manifold Aerator ...

... and draw off pipe with foam filled polyethylene floats and cast iron **swing joint**. ...  
 technical managers, CAD designers, project engineers and managers, ...  
[www.idswater.com/water/US/KLA\\_Systems/Aeration\\_Wastewater\\_Industry/94\\_0/g\\_supplier.html](http://www.idswater.com/water/US/KLA_Systems/Aeration_Wastewater_Industry/94_0/g_supplier.html) - 47k - [Cached](#) - [Similar pages](#)

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... 1.2.2 #6 National CAD Standard ... 3.2.6 Added Hose Bib on **Swing Joint** to Valve Groups. 26 October 2004. 3.2.6 Added Quick Coupler Valve to Backflow ...  
[www.facilities.utah.edu/cdc/DesignStandards/RevisionsSummary.pdf](http://www.facilities.utah.edu/cdc/DesignStandards/RevisionsSummary.pdf) - [Similar pages](#)

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### Dave Lloyd's Log

... you need a **swing joint** with a curve on a sphere that marks the limits - ie, ... A CAD package would have an implicit understanding of the volumes (but ...  
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### Leading Edge > The Publication for Solid Edge Users > December 2004

Monitoring Force Ensures Perfect Joint :: Thanks to an innovative **swing joint**, ... The application lets you share 2D and 3D computer aided design (CAD) data ...  
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### Available Products

... ORDER 1000 GENERIC CAD DRAWINGS ON CD-ROM. Click on pic icon for more info >>> ... Quick-Coupling Valve On **Swing Joint** Riser - Typ. Installation Detail ...  
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... Reproducible as-built system CAD file and drawings ... **swing joint** riser. 2. Lawn spray head: same as above or soft plastic "cutoff" nipple ...

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... Use pipe specifically intended for use as a flexible **swing joint**. Inside diameter: 0.490+0.010 inch. ... Using technical drafting pen or CAD, duplicate ...

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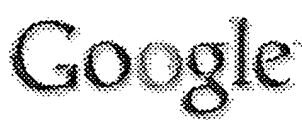
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... is to **design** and specify the use of what is commonly called a **swing joint**. ... use a **swing joint** of any kind, you should at least install the **sprinkler** ...

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 grounds\_maintenance\_increase\_sprinklerhead\_longevity/ - 43k -  
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... you must first determine the correct **Sprinkler System Design** ... **SWING JOINT**. SJ SERIES. **Sprinkler System Overview**. **SPRINKLER CONTROLLER WIRE** ...

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... causing damage to the **sprinkler** system. Note that a typical. **swing joint** in a hard-pipe ... **Design** professionals can also **design** the **sprinkler** sys- ...

www.flexhead.com/pdf/pmengineer2.pdf - [Similar pages](#)

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... water supply to the **sprinkler** head. The **swing joint**. also provides the **sprinkler** head with some ... towards a significant **design** change that had a major ...

www.fluent.com/solutions/articles/ja109.pdf - [Similar pages](#)

CFD Review | CFD Improves Irrigation Components

... purpose of a **swing joint** is to connect the water supply to the **sprinkler** head. The **swing joint** also provides the **sprinkler** head with some flexibility in ...

www.cfdreview.com/application/03/01/20/1514222.shtml - 38k -

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Lateral Pressure Loss (Landscape **Sprinkler Design Tutorial**)

Jess Stryker's Free Landscape **Sprinkler Design Tutorial** for Homeowners and ... be a PVC **swing joint** using pipe and fittings the same size as the **sprinkler** ...

www.irrigationtutorials.com/sprinkler13.htm - 13k - [Cached](#) - [Similar pages](#)

Install Sprinklers and Emitters - Landscape Irrigation System ...

... You will quickly see the advantages of using the flexible **swing joint** risers when you begin ... See the **sprinkler design** tutorial for details. ...

www.irrigationtutorials.com/instal16.htm - 17k - [Cached](#) - [Similar pages](#)

Features Item : New Seismic Fire **Sprinkler Regulations**

... The IBC Code and **Sprinkler Design** in Suspended Ceilings ... Alternatively, a **swing joint** that can accommodate 1 in. (25 mm) of ceiling movement in all ...

www.pmengineer.com/CDA/ArticleInformation/

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 Wood & Hardware for Your Project  
 www.Rockler.com

Rotaflow Pipe SwivelJoint

Supply & **design**. Multiple flow,  
 High or low pressure, all sizes.  
 www.rotaflow.com

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... you must first determine the correct **Sprinkler System Design ... SWING JOINT ASSEMBLIES**. Transfer the number of sprinklers required from Step 5 to the ...

[www.hunterindustries.com/Resources/PDFs/Technical/Domestic/lit226w.pdf](http://www.hunterindustries.com/Resources/PDFs/Technical/Domestic/lit226w.pdf) -

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... Fire Protection Details are the most complete set of CAD fire protection details

... relied upon for the design of fire sprinkler systems, but an aid. ...

[www.elitesoft.com/web/plumbing/firecaddetails.htm](http://www.elitesoft.com/web/plumbing/firecaddetails.htm) - 22k -

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**Fire Sprinkler Design Software**

... AutoSPRINK VR is a stand-alone Fire Sprinkler CAD program for the Microsoft®

... AutoSPRINK line of fire sprinkler CAD programs for Microsoft Windows. ...

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A computer aided design program. Fire Design Cad is a third party add on to

AutoCad 14 or 2000. This system is customized to enhance the speed of designing ...

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... Sprinklers manufactures prioritized by content: specs, cad details, ...

fire sprinklers wet-pipe Sprinkler head Fire-protection sprinkler system valve.

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**Fire Sprinkler Systems CAD Designer**

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Harvel BlazeMaster - Meets NFPA and ASTM standards. UL and LPCB Listed.  
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**www.orthsupply.com**

Fire Sprinkler Heads commercial and residential all types & temperature  
[www.orthsupply.com](http://www.orthsupply.com)

**Home Firefighting Systems**

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[www.HomeFireFightingSystems.com](http://www.HomeFireFightingSystems.com)

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Made in China. UL/ULC Listed.  
 Sprinkler, Automatic and Open.  
[www.ChinaFireSprinkler.com](http://www.ChinaFireSprinkler.com)

**Fire Sprinkler System?**

Installed? Replaced? Repaired? Free Local Fire Contractor Search. Aff.  
[www.homeconnections.com](http://www.homeconnections.com)

**Fire Sprinkler Systems**

Koetter Fire Protection- Dallas Commercial, Industrial Protection  
[www.koetterfire.com](http://www.koetterfire.com)

**Cad Fire Sprinkler**

Generate Leads for IT Software Services - Consulting - Hardware  
[www.KnowledgeStorm.com/WhitePapers](http://www.KnowledgeStorm.com/WhitePapers)

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[www.craigslist.org/sfc/egr/69346089.html](http://www.craigslist.org/sfc/egr/69346089.html) - [Similar pages](#)

### Specialized and Miscellaneous CAD Products

... 3D CAD program for the design of **fire sprinklers** using Microsoft Windows ...  
for design and hydraulic calculation of **fire sprinkler** systems; Iced\*CAD ...  
[www.tenlinks.com/CAD/products/specialized.htm](http://www.tenlinks.com/CAD/products/specialized.htm) - 31k - May 14, 2005 - [Cached](#) - [Similar pages](#)

### Doug Stumpf Associates

... Design and draw **fire sprinkler** system shop drawings. CAD experience preferred.  
Perform hydraulic calculations of the **fire sprinkler** systems. ...  
[www.ds-assoc.com/sprink.htm](http://www.ds-assoc.com/sprink.htm) - 12k - [Cached](#) - [Similar pages](#)







### More About Rollins Fire Sprinklers of Santa Cruz, CA

Learn about **fire sprinkler** systems. Facts and Myths about **Fire Sprinkler** Systems.  
The History of **Fire Sprinklers**. **Fire Sprinkler** related links ...  
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... 1.2.2 #6 National CAD Standard ... 15501 #6 Added Flow Switch Tester on  
**Sprinkler System Riser** ... 9.2.6 16721 #14d, page 5, **Fire Alarm Wiring (09-0180)** ...  
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### [UIC OCP - Division 02 Building Standards](#)

... Lateral pipe to **sprinkler** heads to be PVC CL-160, 160 PSI rated. ... QCVs shall  
 be installed on a triple elbow **swing joint**. ...

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### [ORF Internet | Design Policy - Volume 4 \(H. Plumbing\)](#)

... incoming water service sizing includes all other plumbing and **fire** water demand.

... An expansion joint or acceptable horizontal offset (**swing joint**) is ...

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**Joint** Assembly 518-2 Tree Skating 519-3 Tree Well 520-2 Tree Planting ...

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... Install **sprinkler** heads of the same manufacturer and psi rating within the

... Quick couplers: Dura 1-A4-1-11-18 **swing joint** with DL-010 quick lock, ...

[depts.washington.edu/fsesweb/fdi2003/02G-T%20Civil/Civil\\_All.pdf](http://depts.washington.edu/fsesweb/fdi2003/02G-T%20Civil/Civil_All.pdf) - [Similar pages](#)

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... The **sprinkler** layout of the building in this tutorial is separated into three

... a Star elevation is inserted at each **swing joint** to help SprinkCAD ...

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... [Provide check valve below each **sprinkler** body on riser.] ... Provide **swing**  
**joint** assembly attachment between lateral lines. and fixed risers. ...

[www.ccb.org/docs/ufgshome/pdf/02811.pdf](http://www.ccb.org/docs/ufgshome/pdf/02811.pdf) - [Similar pages](#)

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... **swing joint**, "Lasco" brand or pre-approved equal. Specifications for piping shall

... **Fire Sprinkler** heads shall be located in the center of a tile. ...

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... **sprinkler** requirements, exit width required and exit width provided, ...

Alternately, a **swing joint** is permitted to accomplish the same movement. ...

[www.dfc.state.ut.us/publications/design\\_manual\\_draft\\_040405.doc](http://www.dfc.state.ut.us/publications/design_manual_draft_040405.doc) - [Similar pages](#)


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... actual building area, height allowed in feet and stories, **sprinkler** ...







The use of the **swing joint** is not defined in the code and no ...

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# Fire Sprinkler Design Software



## OmniCADD® SDS

OmniCADD® SDS is a group of programs that work together to customize AutoCAD to meet the needs of engineers who design sprinkler systems. This section describes a partial list of the capabilities of this program

- Quickly and accurately draw the walls of a building, and make modifications for "custom" areas within the building.
- Work within either a generic warehouse environment in which a sprinkler piping floor plan can quickly be generated, or within a custom environment that gives you total control over all parameters of the sprinkler system you are designing. A drawing may consist of areas that are drawn within both the custom and warehouse environments.
- Access a complete library of all commonly specified components of a sprinkler system, such as nozzles, pipe materials, hangers and the like.
- Generate a complete stocklisting report (Fabrication sheets) directly from within the program, and generate new takeouts and material pricing as often as required by changes in the drawing.
- Accommodate pricing information from up to three vendors and enter user-defined devices into the database.
- Handle errors in drawings easily by "undoing" the insertion of entities and their attributes. This feature also resets environmental variables within the program and ensures that unwanted information is not accidentally left in your drawing.
- Automatically insert General Notes and Symbols, System Design notes, pipe materials, hangers, riser details, and other information.
- Automatically create a title block, and easily enter and edit title information.
- Automatically generate ceiling plans and lighting grids for a variety of standard lighting and unlimited custom configurations.
- Insert hangers, and automatically calculate their length and placement.
- Automatically layout the piping sprinkler system, heads and attachment of piping to heads and fittings.
- Automate existing hydraulics software.
- Make calculations for system weight and volume (dry pipe systems, shipping weight, etc.)

## Demo Program

**Hydratec****HydraCAD**

HydraCAD is the most complete and integrated CAD package available. Designed as an overlay system for AutoCAD®, HydraCAD is a fully integrated software package specialized toward the design of fire sprinkler systems.

**HydraCALC**

Hydratec's hydraulic programs have been industry leaders for more than twenty-five years. From their humble beginnings on Wang cassette tape computers to modern super-desktops and networks, they have always allowed for more flexibility and greater customization than any other hydraulic package.

**HydraBID**

HydraBID is a Microsoft Excel based estimating program. It allows for the pricing of materials and labor and the building of kits and assemblies using the speed and simplicity of Microsoft Excel '97, Excel 2000 and Excel XP.

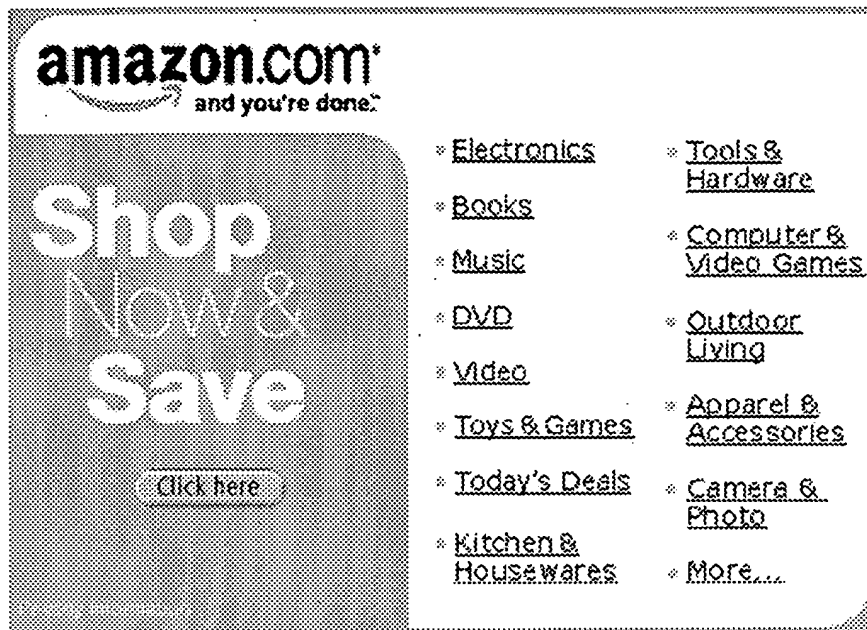
**HydraLIST**

Hydratec's stocklisting programs have been industry leaders for more than twenty years. HydraLIST has been in use by fabricators and contractors the world over. No other package has as much flexibility or as much field experience.

**Fire for Windows , Elite Software****FEATURES**

- Performs Hydraulic Calculations Following NFPA 13
- Handles Sprinkler Systems with Up to 1,000 Sprinklers
- Works on Trees, Grids, and Hybrid Sprinkler Systems
- Both English or Metric Units Versions Available
- Tree Grid Pipe Network Builder Included
- Links to AutoCAD through the SoftDesk Piping Module
- Computes Flow Rates, Velocities, & Pressure Drops
- Automatically Sizes Pipe
- Analyzes Stand Pipe Systems
- Prints Supply/Demand Graph on Screen & Printer
- Allows for All Types of Pipe Materials
- Automatically Calculates Fitting Equivalent Lengths
- Provides Comprehensive NFPA style, high quality color presentation reports

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### **FireAcad**

FireAcad is the most complete Fire Sprinkler Design Program on the market. Hydraulic Calculation Software, Material Listing Software and Drafting software designed for Automatic Fire Sprinkler design. The versatility of FireAcad will save you time and money by simplifying the design process and greatly increasing your accuracy. FireAcad was designed by a team of fire protection engineers specifically for the fire protection industry. FireAcad has been helping sprinkler design engineers in the field since 1988. Simplicity is FireAcad's greatest feature. It's so easy to use, very little computer experience is needed to start designing with FireAcad.

[Demo Program](#)

### **HP6M - Fire Sprinkler Tree System Design**

Designs tree and loop fire sprinkler systems using NFPA methods. Prints full graphics water graph, detailed outputs in NFPA format. Automatic pipe diameters, fitting equivalents, state-of-the-art input screens, windows, defaults, error checking, over 100 "help" messages.

### **Proto Sprinkler**

PROTO-SPRINKLERTM performs steady-state analyses of fire suppression sprinkler systems calculates the required riser pressure to meet minimum nozzle demands or the actual flowrates with known pump curves or pressures. Using a complex set of simultaneous equations represented by a matrix the program calculates corrections to the initial pressure estimates using a combination of a successive overrelaxation method and the Newton-Raphson method.

PROTO-SPRINKLER also follows the standard methodology and approach for calculations as specified in NFPA 13, Standard for the Installation of Sprinkler Systems, and NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection. Proto-Power has developed PROTO-SPRINKLER Windows-based computer software which enables the user to model and evaluate fire sprinkler systems that range from simple to complex designs. PROTO-SPRINKLER has been developed and validated in accordance with Proto-Power's Nuclear Software Quality Assurance Program which has been audited and accepted by major utilities

#### **Features:**

##### **System Description**

Designer, client, and building information

System information (type, class, area, coverage, etc.)

Water supply (test date and time, flow, etc.)

**User Defined Pump Curves**

Input multiple pump curves for each pump  
 Generate pump curves based on actual field test data (max. of 25 points)  
 Data points can be imported from an ASCII file  
 Libraries

Equivalent pipe lengths for fittings  
 Sprinkler head K-values  
 Pipe sizes and materials  
 Output Reports

Choose from 9 formatted reports  
 Q1.85 graph  
 Print only what you need

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Fatal fires highlight  
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Design of  
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Protection...  
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Suppression  
progression  
 American Society f...  
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The Design and  
Layout of Fire  
Sprink...  
 Mark Bromann  
 New \$126.38!

**SprinkCad**

Compatible with AutoCAD 2000, 2000i and 2002.

Existing drawings, catalogs, report and strategy files work unchanged with SprinkCAD Pro II®. Ease into the new features of SprinkCAD Pro II®. None of the procedures for designing, calcing, or listing a job need be changed.

Integrated Hydraulic Calculation and Stocklisting modules deliver a complete piping solution.

SprinkCAD Pro II is a complete Fire Sprinkler Drawing package. A library of tools is included to allow the drawing of basic building units such as walls, ceilings, beams, etc., as well as sprinkler piping elements. Perform multiple calculations until the desired pipe sizes are achieved and stocklist the plan without the need to run another program.

Manually lay out any system quickly and easily with fast, accurate drawing tools.

Use the powerful System Builder to design rooms, bays...even entire buildings in a flash.

Complete the drawing with only the piping information desired.

SprinkCAD Pro II offers control of the type and style of information placed on the piping plan.

Extensive database of sprinklers, pipes, fittings, valves and more.

The database includes the latest extended coverage and special application sprinklers.

**PIPENET SPRAY/SPRINKLER**

Pipenet Spray/Sprinkler is the only fluid flow software package available which has in-built compliances with the internationally recognised NFPA codes for the design of fixed fire protection systems.

Pipenet Spray/Sprinkler can be used in the design of fixed fire-protection systems such as deluge, ringmain, sprinkler and foam solution systems for offshore facilities, refineries, ships, petrochemical and chemical plants. Pipenet Spray/Sprinkler is recognised by international oil and gas companies as the standard tool for this type of design

### Features

- Complies with National Fire Protection (NFPA) 13 and 15 rules
- Models deluge, ringmains, foam solution and sprinkler systems
- Hydraulically most remote nozzle option
- Single or multiple pumps
- Multiple pipe types
- Models breaks and blocks in pipes
- Hazen-Williams or Bernoulli pressure drop equations
- Built-in pipe schedules
- Built-in pipe lining types
- Users' own pipe schedules
- Automatic pipe sizing and selection
- Orifice plates to BS1042 and two other codes
- Overboard dump valves
- Nozzles may be turned on or off
- Pipes may be grouped into common sizes
- Schematic display of network and/or text entry



### "THE" Sprinkler Program 2001, FPE SOFTWARE

A fully functional, user friendly, 32 bit sprinkler hydraulics program for Windows 95, 98, 2000, NT, ME and XP.

- Supply and Demand capabilities
- accepts negative elevations
- system size capability: 600 nodes, 600 pipes, 5 sources of supply, 5 fire pumps and 5 flow dependent pressure loss devices
- full-screen editing with "block" edit features: "block" copy, replace, move and erase
- data is always accessible for updates and/or corrections
- automatically updated water supply graph vs. sprinkler demand line
- a unique dynamic error checking routine which displays an error message and then positions the cursor at the error location
- data can be entered in any order with up to eight character node IDs
- the ability to use variable or fixed pressure water supplies
- properly handles closed pipes and check valves
- unmatched hydraulic calculation speed
- the unique ability of interactively overlaying the calculated results on top of the input data, making review and revisions a snap
- easy to read printouts show: node data with actual sprinkler densities, pipe data, water supply data and water supply/system demand graphs
- six user modifiable equivalent fitting length tables which are automatically accessed with a change in "C" value, pipe diameter, or pipe type/schedule
- 38 of 50 available pipe diameters predefined for easy of use
- automatic Grid and Tree builder routines
- innovative and easy to use "Peaking" for gridded systems
- ISO style cover sheet

- fully user configurable to allow default values
- NFPA 13-1994, 1999 Edition compliant
- expanded printing capabilities with multiple report formats
- <metric capability (bar/lpm & kpa/lpm)
- <true 1.85 power water supply vs. sprinkler demand line graph

### **HASS® (Hydraulic Analyzer of Sprinkler Systems)**

HASS® (Hydraulic Analyzer of Sprinkler Systems) was first licensed in 1976 as a tool for easy use by engineers, sprinkler contractors and reviewers alike. Now HASS gives you the tools you need to determine water supply adequacy based on system demand and distribution piping. With HASS, you can perform hydraulic analysis in accordance with NFPA 13, calculating any connection of nodes and pipes. What's more . . . you get major revisions, year in and year out into the New Millennium, with new features at no extra charge

HASS includes more than just the ability to calculate. For gridded systems, the Grid Estimator gives proposed pipe sizes, and automatically generates node and pipe data. Similarly, the Tree Generator gives node and pipe data using the ordinary hazard piping schedule or uses pipe sizes you specify. When you use the System Builder, you can combine pipe segments into branch lines, locate cross mains and riser nipples, then let the System Builder automatically generate node and pipe data . . . ideal for more complex piping arrangements such as multiple cross main grids. (In each of these cases, the Pipe-to-Source Option lets you tie the system to the source before generating data.) HASS includes Darcy-Weisbach calculation capability for NFPA 750 water mist systems and flow calculations for other fluids such as foam concentrate.

HASS printed reports follow the NFPA 13 format, and include calculation results as well as graphics N1.85 water supply curves and flowplot diagrams with the ability to transfer reports by e-mail. A review of HASS benefits follows:

- **AUTOMATIC PEAKING** the grid proves the remote area.
- **MINIMUM PIPE SIZES** are determined by the GRID ESTIMATOR.
- **MINIMUM END HEAD FLOW OR PRESSURE** (single or multiple nodes) as well as total supply calculates quickly.
- **DENSITY AND AREA SPECIFICATION** on a per node basis, gives an alternative to minimum end head specification.
- **VELOCITY PRESSURES** can be used in the calculations required by NFPA 15.
- **DARCY-WEISBACH CALCULATION** of water mist systems as required by NFPA 750 and foam concentrate piping.
- **AUTOMATIC FITTING LENGTH ADJUSTMENT** based on Schedule 40 data, is in accordance with NFPA 13.
- **PIPE TABLE** entry by nominal diameter and fittings by letter speeds up data entry even more.
- **SYSTEM BUILDER** develops complex piping arrangements (especially MULTIPLE CROSS-MAIN GRIDS).
- **PIPE-TO-SOURCE** option ties the system to the source before developing the Grid, Tree, or more complex systems.
- **NODE & PIPE DATA** automatically generated by GRID ESTIMATOR, TREE GENERATOR & SYSTEM BUILDER.
- **DELUGE SYSTEM** option generates a system with all sprinklers flowing.
- **INTELLIGENT TAG GENERATION** assigns the next sequential tag from the current tagging scheme.
- **AUTOMATIC POSTING** of coversheets and riser nameplates keeps data updated whenever a data file is recalculated.
- **MISSING PIPE IDENTIFIER** locates points of discontinuity, where pipe data entry may be in error.
- **FIRE PUMP** entry is by rated flow and pressure or by five points of pump curve.

- **METER, BACKFLOW PREVENTER AND PRESSURE REDUCER** entry is by manufacturer's pressure loss data.
- **NEGATIVE PRESSURES** are permitted at non-flowing nodes.
- **VIRTUALLY UNLIMITED SYSTEM SIZE** with more than 1,000 nodes calculating in just a few minutes.
- **DIRECTORY ACCESS** lets you select files for sprinkler data, pipe tables, cover sheets, and riser nameplates.
- **HELP SCREENS** provide advice and direction on request.
- **AUTOMATIC SAVE** prevents loss of all data on power failure, and allows data entry in more than one session.
- **GLOBAL AND INDIVIDUAL CHANGES** speed up the editing process for both nodes and pipes.
- **INSERT AND DELETE** lets you make node or pipe changes at any point in the data sequence.
- **FIND AND REPLACE** lets you change attributes for data fields in the same column, and confirm each change.
- **EQUIVALENT CALCULATORS** (K-factors, branch lines, grids, rolled grooves, and fitting lengths) eases data entry.
- **CUSTOMIZE PROGRAM DEFAULTS** lets you specify the upper and lower limits for certain values within HASS.
- **MERGE** option lets you tie one system to . . . and feed it from . . . another system.
- **RENUMBERING** option lets you provide a smooth numerical sequence for your extensive node and pipe revisions.
- **HAMMER UTILITY** for analysis of rapid deceleration of water flow in pipes.
- **WATER SUPPLY FLOW TEST UTILITY** simplifies the reporting of test results.
- **PRINTED REPORTS** follow the NFPA 13 format.
- **PIPE TABLE VERIFICATION** assures that the pipe table for printing matches the pipe table used for data entry.
- **REPORTS** display on the screen, and print as a quick copy or in a detailed format for submittal or e-mail transfer.
- **DELUGE REPORT** can show required and actual densities for each node listed.
- **COVERSHEETS AND RISER NAMEPLATES** are developed from templates, saved and printed with reports.
- **N1.85 WATER SUPPLY ANALYSIS, LAYOUT AND FLOWPLOT DIAGRAMS** use graphics displays / printouts.
- **EARTHQUAKE BRACING LOAD CALCULATION** for sprinkler pipe sway bracing design.

## **AutoSPRINK VR**

AutoSPRINK VR is a stand-alone Fire Sprinkler CAD program for the Microsoft® Windows family of operating systems. This powerful software from M.E.P.CAD, Inc. signals a revolutionary approach to Computer Aided Design. Based on a myriad of new concepts, ideas and composition methods, AutoSPRINK VR is causing designers to rethink the possibilities of CAD technology.

Until now all major fire sprinkler design software programs were third party add-ons to other CAD systems that employed simple lines to depict real world objects. AutoSPRINK VR requires no additional CAD software; it has its own 3D CAD design engine based on object-oriented technology. This methodology greatly enhances CAD capabilities, arming system designers with limitless possibilities.

AutoSPRINK VR is the latest update to the outstanding AutoSPRINK line of fire sprinkler CAD programs for Microsoft Windows. Loaded with new features and a broad array of internal improvements, AutoSPRINK VR is fast, easy and powerful. Its state-of-the-art interface allows total control over your drawings and the individual elements that compose them. AutoSPRINK VR redefines the possibilities of Computer Aided Design technology, providing you with the essential tools to explore new ideas and bring original concepts to reality.

AutoSPRINK VR is a system so advanced and flexible, yet practical and cooperative that design is unflinchingly fun. And we're not through yet; M.E.P.CAD is continually adding new features and exciting enhancements to keep AutoSPRINK VR on the cutting edge of technology. Real automation for sprinkler system design software, this is the

future of Computer Aided Design, and M.E.P.CAD brings it to you readymade, prepackaged and right for the job.



## GoFlow2000

GoFlow2000 is our Windows development of software designed to provide the capability to quickly and intuitively perform an accurate hydraulic analysis of a fire protection sprinkler system and output high quality comprehensive results customized for the user. Throughout this development, we worked very closely with loss control experts from two major insurance companies. We incorporated virtually every suggestion they made to improve the capabilities and make their job easier. This includes such features as a built in selection list of over 200 backflow preventors (you can add new ones) and automatic layouts of tree systems sized by pipe schedule for three different hazard classifications

### Features

- Automatic layouts for grids, trees, and loops
  - over 20 configuration
  - automatic fittings assignment
  - tree systems by pipe schedule
- Graphical data entry using selectors and sliders. Selections include:
  - pipe schedules (over 20)
  - standard fittings (9)
  - backflow preventor devices (over 200)
- Graphical results presentation
  - sprinkler layout plots
  - display data or results
- Comprehensive high quality summary page
  - client data
  - hydraulic data/results
  - sprinkler schematic
- Water supply plots
  - results of hydraulic analysis
  - user supplied data
  - rated and tested pump curves
  - combined supply/pump curves
- Comprehensive tabulated results presentation
  - detailed summary of data
  - detailed table of results
- Comprehensive hydraulics capabilities including:
  - booster pumps of all characteristics
  - multiple pressurized supplies
  - storage tanks
  - choice of hydraulic analysis to meet minimum requirements (required capacity) or use available



supply pressure (available capacity)  
- automatic determination of remote area

- English and a variety of metric units

## **CALCER for Windows**

CALCER is an easy to use sophisticated hydraulics calculations program. The program will allow you to easily calculate any type of sprinkler system. I have taught hydraulic courses at University of Cincinnati utilizing CALCER. This program works! Calcer makes it is very easy for new users to get started in hydraulic calculations. Calcer makes it easy to do fire protection hydraulics.

- NEW US or Metric hydraulic calculation in the same program. You can input a hydraulic model in either type of units. You can switch a hydraulic model between Metric and US or US to Metric with one function.
- NEW Now has sophisticated tree builder.
- NEW Now is network ready.
- Demand calculations or required calculations. Calculates from the end head to the supply or from the supply to the most remote head.
- Proven reliability - In use for more than seventeen years. Throughout the US and in many countries.
- Extremely easy to use windows interface.
- Grid estimator. Change a grid estimate to a final set of hydraulics with the touch of one button.
- Drag and drop interface. Change pipe sizes with drag and drop convenience.
- Multiple search and replace. Replace multiple items with one operation. This function alone is worth the price of the program.
- Context sensitive help. The entire 70+ page direction manual is in the help screens.
- Multiple pumps.
- View input by: from node, designator, to node, label or tag order.
- View output by: from node, to node, velocity, loss/ft or total loss order. Imagine seeing the piping arranged so that the pipe causing the greatest loss is on top. How much time could you save with this one feature?
- Name and address database. Drag and drop your client's name in the cover sheet. Maintain a list of insurance authorities. Have a list of water departments handy. There is even an automatic phone dialer.
- 999 Nodes
- Automatic peaking of grid calculations.
- Many advanced features:
  - Pop up hydraulic calculator with Hazen and Williams, equivalent k-value and velocity. What's more, you can solve for any variable in the hydraulic equations.
- Flow Test database. Calcer maintains a complete history of your flow tests. The data can be sorted and filtered in a variety of ways.
  - Flow test calculator.
- Sophisticated three step input error checking.
- Unlimited pipe type with unlimited diameters per pipe type.
- Comes complete with multimedia movies to get you up and running quickly.
- Licensed per office NOT per computer (Up to ten computers).
- Thirty-Day money back guarantee. We have complete confidence in our software and stand behind it - as few others companies do.

## **Hydronics Engineering**

Hydronics Engineering is producing and marketing fire sprinkler hydraulics software since 1989 and have a total of 7 different packages for DOS and Window.

They have three different packages for the Hydraulic Calculation of Fire Sprinkler Systems :

### **1. COMMERCIAL FIRE SPRINKLER HYDRAULICS**

<http://www.hydronicseng.com/hydrn50.htm>

Computer software for the design and hydraulic calculation of Commercial Fire Sprinkler systems in accordance with NFPA-13, NFPA-231c. User friendly menus, icons, tool bars and spreadsheets. Include pumps and fixed pressure devices. Export results to Microsoft Excel.

Technical Specifications:

- ° Fire Sprinkler Hydraulic Calculations for NFPA 13,15,231-C.
- ° Spreadsheets, Menus, Icons, Tool Bar and Context Sensitive ToolTips.
- ° Unique "in cell" Insert, Delete, Cut, Copy and Paste Spreadsheet Functions.
- ° Pipe Network Connectivity and Interactive Error Checking.
- ° Inside Hose Streams at any Node in the Piping Network.
- ° Pipe Fittings expressed as Letter Symbols ( EE, 2E, 2T, ... ) or Pipe Length.
- ° Fully Editable K-Factor and Pipe Tables. User Defined Default Pipe Tables.
- ° Friction losses calculated using the Hazen-Williams equation.
- ° Equivalent Length and C-Factor automatic Retrieval and Display.
- ° Backflow Preventer and Double Detector Check as Fixed Pressure Loss.
- ° Grid Estimator with Automatic Peaking of the Most Remote Area.
- ° Pipe Table Editor, Velocity Analyzer, Equivalent-K Calculator.
- ° Velocity Analyzer uses Moody's f and Reynolds Number to monitor Turbulence.
- ° Hazen/Williams and Darcy/Weisbach for Maximum Velocity Analysis.
- ° Pump Analyzer Automatically Computes Rated Pressure, Rated Flow, Brake HP.
- ° Printer Font Menu supports Parallel and USB printers.
- ° Export results to Microsoft Excel and other spreadsheet applications.
- ° Totally INTUITIVE and EASY. You DON'T NEED videos to use our Software.
- ° 24/7 Toll Free Customer Support.

### **2. RESIDENTIAL FIRE SPRINKLER HYDRAULICS**

<http://www.hydronicseng.com/resden42.htm>

Computer software for the Design and Hydraulic Calculation of Residential Fire Sprinkler systems in accordance with NFPA-13D/13R. User friendly menus, icons, tool bars and spreadsheets. Calculate with Static/Residual/Flow Data or Static Pressure Data. Fully Editable and User Defined Default Pipe Tables. Pumps automatically analyzed and calculated. Include Water Meters, Valves and Domestic Water Demand.

### **3. FIRE STANDPIPE HYDRAULICS**

<http://www.hydronicseng.com/stphyd43.htm>

Computer software for the Hydraulic Calculation of Fire StandPipes and Private Hydrants per NFPA-14. User friendly menus, icons, tool bars and spreadsheets.

Pumps automatically analyzed and calculated. Include valves and additional standpipe flows. Export results to Microsoft Excel.

## **PAYPERCALC**

### **What is PayPerCalc?**

PayPerCalc is a system for doing your fire sprinkler hydraulic calculations without purchasing any software. We do the hydraulic calculations for you. Here are the advantages:

You can do hydraulic calculations without buying the software.

The calculations are done using the latest version of our software.

You save money by not having to purchase and learn how to use new software.

You save money by only calculating those projects that need to be calculated.

You save time by letting us do the work for you.

### **The Submittal Report.**

They will email you the NFPA Style Submittal Report in the form of a PDF file that can be viewed and printed using Adobe Acrobat Reader. The Report is a detailed engineering analysis of your fire sprinkler system that can be submitted for approval to a reviewing agency or authority having jurisdiction. It is divided into four major sections:

The COVER sheet presents a summary of the fire sprinkler hydraulic calculation.

The NODE sheet displays the flow and pressure that occurs at each and every node in the fire sprinkler system. It presents a summary of system performance including available pressure, required pressure and the pressure cushion.

The PIPE sheet is a detailed tabulation of the flow and pressure that occurs at each and every pipe in the fire sprinkler system.

The graph is a semi-logarithmic plot of two curves. The supply curve represents flow and pressure available from a water supply source. The demand curve plots flow and pressure required to satisfy the design requirements of fire sprinkler system.

## **Program system SPRINK <Version 2.60>**

Calculation of Pressure Drop in Sprinkler Systems

SPRINK is a modular program for the calculation of pressure drop in branched and intermeshed piping networks with circular cross sections.

SPRINK calculates direction of flow, rate of flow and pressure loss for individual pipe sections, as well as the pressure of individual of individual node, and the resulting flow distribution for an intermeshed system of any complexity.

The calculation is carried out for a given system assuming a steady state flow.

A graphical representation of the network plan (plot), with the results included therein, is displayed on screen, or produced at a printer or plotter

## **ECHOSCAN**

### **FIRE SPRINKLER SYSTEM DESIGN (IBM & compatibles) CAT.# 148-D01-38**

FSTLD interactively works with the designer to develop fire sprinkler systems of the tree and loop types. It employs the NFPA formulas and calculation procedures to produce printouts. In the NFPA "Manual 13" format, ready for presentation to Underwriters for approval.

For each section you may specify the sprinkler head "K" value; Hazen-Williams "C" factor; elevation; and pipe length. Additional hose flows may be included at any point. Calculation of flows from each head is automatic. "K" values are constantly recalculated for the downstream portion of the system and may be re-used to eliminate detailed inputs for similar branch lines. FSTLD also derives the equivalent pipe length for simple parallel pipe supply lines. Included are data files for internal pipe diameters, "C" factors, and equivalent lengths of fittings.

For deluge systems, FSTLD can handle up to 20 flowing lines, each with 20 pieces. There are windows, over 100 help screens and error checks for range and type. Data entry, editing, storage and retrieval are fully prompted, with defaults values supplied wherever possible. Data is saved in named job files for later recall and change.

Requires 448K RAM and an 80 column (or wider printer).

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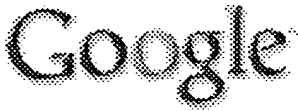
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... Aluminum 3 Flex Leg 5ehicle Mount with Double **Swing** Arm and 2.5" Plate. ...**connection** to the RAM-POD III and at the hinge joint of the two **swing** arms. ...

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... **Swing joints** are preferred for connecting pendent sprinklers to branch lines.

Dielectric unions shall be used to **connect** dissimilar metals (such as ...

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... sprinklers on the CAD backgrounds of theArchitectural reflected ceiling plans,

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... While several CAD systems are designed for fire sprinkler systems — marketed as SprinkCAD, **Autosprink** and FireACAD, among others — Hydratec literally is ...  
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... in Fire Sprinkler Design and Layout / Project management / Stocklisting experience (Pipe & material procurment) / AutoCAD and/or **AutoSprink** experience ...  
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### Deisgn - Build

... He is an engineering graduate of SUNY at Alfred and from sprinkler design schools conducted by **Autosprink** and Tyco, two major equipment manufacturers. ...  
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... **AutoSPRINK** Compliance Software Elite Software FPE Software, Inc. FireAcad Hydratec, Inc. Hydronics Engineering HRS Systems K & E Fire Protection ...  
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... Téléphone :. E-mail :. Je suis intéressé par les logiciels suivants :  
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### Michael J. Onzuka's Resume

... of Tyco International worldwide to attend a training class on the **AutoSprink** fire sprinkler design and material ordering software in Cleveland, Ohio. ...  
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### Specialized and Miscellaneous CAD Products

... **AutoSPRINK** - a stand-alone 3D CAD program for the design of fire sprinklers using Microsoft Windows; AVAX Vector ActiveX - offers ActiveX control for ...  
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... sprinkler CAD program for Microsoft Windows 95/98/NTR from MEPCAD, Inc. **AutoSPRINK** features a 3D CAD design engine based on object-oriented technology. ...  
[www.pmengineer.com/CDA/ArticleInformation/features/BNP\\_\\_\\_Features\\_\\_\\_Item/0,2732,28913,00.html](http://www.pmengineer.com/CDA/ArticleInformation/features/BNP___Features___Item/0,2732,28913,00.html) - 70k - [Cached](#) - [Similar pages](#)

GemFab Cad info

... **AutoSprink** by MEP CAD has a translation program to create GEM Listing files.

Contact Atticus Ellena for technical capabilities. ...

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